CLAIMS

What is claimed is:

1.   An absorption solution/refrigerant system comprising:

a generator for receiving a source of heat, and for receiving a solution including an absorption solution and a refrigerant, said generator utilizing said source of heat to boil a portion of said refrigerant out of said absorption solution; and

a valve for controlling the amount of heat delivered into said generator, and a control for said valve, during start-up said control receiving feedback of a condition in said absorption solution/refrigerant system, and utilizing said feedback to control the amount of opening of said valve.

2.   A system as set forth in Claim 1, wherein said feedback is the temperature of said absorption solution.

3.   A system as set forth in Claim 2, wherein said temperature of said absorption solution is taken as said absorption solution leaves said generator and heads to an absorber, also within said absorption solution/refrigerant system.

4.   A system chiller as set forth in Claim 2, wherein said control receives feedback of an absorption solution temperature change over time, and limits an amount of opening of said valve based upon the magnitude of said absorption solution temperature change.

10

5.   A system as set forth in Claim 4, wherein said control remains in start-up mode as long as said change over time in said absorption solution temperature exceeds a second predetermined amount.

6.   A system as set forth in Claim 1, wherein said control also receives feedback on the magnitude of available heat being delivered into said absorption chiller from said source of heat, and said control controlling said valve at least in part upon said feedback of said available amount of heat.

7.   An absorption chiller as set forth in Claim 6, wherein said source of heat is a multiple micro-turbine system, and said control controls the maximum amount of valve opening based upon the number of micro-turbines operational at any one point.

8.   An absorption chiller as set forth in Claim 7, wherein said control stops any limit on the amount of opening of said valve at chiller start-up if less than some number of said micro-turbines are operational, and maintains said maximum amount of valve opening if some greater number of micro-turbines are operational.

9.   A method of controlling an absorption solution/refrigerant system at start-up comprising:

(1)   providing a generator for receiving a mixed absorption solution and refrigerant, and a source of heating fluid, said heating fluid boiling at least a portion of said refrigerant out of said mixed absorption solution and refrigerant, said generator communicating a boiled off refrigerant into an absorber, and communicating remaining absorption solution to said absorber, and providing a valve on said source of heat; and

(2)   providing feedback to a control of a condition within said absorption solution/refrigerant at start-up, and utilizing said feedback to control a maximum amount of opening of said valve at start-up to limit the amount of heat delivered into said generator.

10.   A method as set forth in Claim 9, wherein said feedback is the temperature of said absorption solution.

11.   A method as set forth in Claim 10, wherein a change in the solution temperature is taken over a period of time, and if said change exceeds a predetermined amount, then a maximum limit on the amount of valve opening is maintained.

12.   A method as set forth in Claim 9, wherein said source of heat includes a number of separate heat sources, and said control turns off any limit at start-up of said valve opening should the number of heat sources operational be less than a predetermined number, but maintains a limit on said valve opening should the number of heat sources which are operational exceed said predetermined number.

12

13.   An absorption solution/refrigerant system comprising:

a generator for receiving a source of heat, and for receiving a solution including an absorption solution and a refrigerant, said generator utilizing said source of heat to boil a portion of said refrigerant out of said absorption solution; and

a valve for controlling the amount of heat delivered into said generator, and a control for said valve, during an increasing temperature mode, said control receiving feedback of a condition in said absorption solution/refrigerant system, and utilizing said feedback to control the amount of opening of said valve.

14.   A system as set forth in Claim 13, wherein said feedback is the temperature of said absorption solution.

15.   A system as set forth in Claim 13, wherein said temperature of said absorption solution is taken as said absorption solution leaves said generator and heads to an absorber, also within said absorption solution/refrigerant system.

16.   A system chiller as set forth in Claim 13, wherein said control receives feedback of an absorption solution temperature change over time, and limits an amount of opening of said valve based upon the magnitude of said absorption solution temperature change.

17.   A system as set forth in Claim 13, wherein said control remains in increase temperature mode as long as said change over time in said absorption solution temperature exceeds a second predetermined amount.

13

18.   A system as set forth in Claim 13, wherein said control also receives feedback on the magnitude of available heat being delivered into said absorption chiller from said source of heat, and said control controlling said valve at least in part upon said feedback of said available amount of heat.

19.   An absorption chiller as set forth in Claim 13, wherein said source of heat is a multiple micro-turbine system, and said control controls the maximum amount of valve opening based upon the number of micro-turbines operational at any one point.

20.   An absorption chiller as set forth in Claim 13, wherein said control stops any limit on the amount of opening of said valve during temperature increase mode if less than some number of said micro-turbines are operational, and maintains said maximum amount of valve opening if some greater number of micro-turbines are operational.